

Biological Evolution and Adaptation: Biological evolution, driven by natural selection and genetic variation, underpins the diversity of life on Earth and the adaptation of organisms to changing environments. The process of evolution occurs through mechanisms such as mutation, genetic recombination, and gene flow, shaping the traits and behaviors of species over time. Research in evolutionary biology explores how organisms evolve in response to environmental pressures, including climate change, habitat loss, and human activities. Understanding evolutionary processes is critical for conservation efforts, as it informs strategies for preserving biodiversity and enhancing the resilience of ecosystems facing anthropogenic threats.